

# THIR UNITED SHATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# Monsanto Jechnology IIG

THERE HAS BEEN PRESENTED TO THE

### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT. THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

SOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY TEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE GET TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OPPERING IT FOR SALE, OR REPRODUCING IT, OR RETING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE URROSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CORN. FIELD

'1226211'

In Vertimonn Thereof, I have hereunto set my hand and caused the seal of the Hant Bartista Frotection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of Yovember, in the year two thousand and eight.

Attest.

Gerz

Commissioner Plant Variety Protection Office Agricultural Marketing Servic and a south

REPRODUCE LOCALLY. Include form number and date on all reproductions		Form Approved - OMB No. 0581-0055			
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE		The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.			
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions and information collection burden statement on reverse)		Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).			
1, NAME OF OWNER		2. TEMPORARY DESIGNATION OF	R 3. VARIETY NAME		
Monsanto Technology <del>L</del>	L.C. LLC	None	1226211		
4. ADDRESS (Street and No., or R.F.D. No., City, State, and	ZIP Code, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY		
800 N. Lindbergh Blvd.		(815) 758-9281	PVPO NUMBER 2000 120		
Creve Coeur, MO 63167	<b>,</b>	6. FAX (include area code)			
U.S.A.	,	(815) 758-3117	FILING DATE		
<ol> <li>IF THE OWNER NAMED IS NOT A "PERSON", GIVE FOR ORGANIZATION (corporation, partnership, association, etc.</li> </ol>		9. DATE OF INCORPORATION			
Corporation	Delaware	August 27, 1999	March 1, 2006		
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE	S) TO SERVE IN THIS APPLICATION. (F	irst person listed will receive all papers)	F   FILING AND EXAMINATION FEES:		
Timothy R. Kain	·		\$ :4382.00		
the state of the s	Mich	ael J. Roth	R DATE ///		
8350 Minnegan Road Waterman, IL 60556		I. Lindbergh Blvd.	s 768-00		
U.S.A.		Coeur, MO 63167	lyl ' * a /		
0.0.M.	U.S.A	<b>.</b> 	E DATE 10/27/08		
11. TELEPHONE (Include area code)	12. FAX (Include area code)	I 13. E-MAIL	14. CROP KIND (Common Name)		
(815) 758-9281	(815) 758-3117	trkain@monsanto.com	· · ·		
15. GENUS AND SPECIES NAME OF CROP		16. FAMILY NAME (Botanical)	17. IS THE VARIETY A FIRST GENERATION HYBRID?		
Zea mays		Graminae	☐ YES X NO		
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT (Follow instructions on reverse)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act)			
a. X Exhibit A. Origin and Breeding History of the Varie	ty	☐ YES (If "yes", answer items	20 and 21 below) X NO (If "no", go to item 22)		
b. X Exhibit B. Statement of Distinctness		20. DOES THE OWNER SPECIFY THAT			
c. X Exhibit C. Objective Description of Variety		VARIETY BE LIMITED AS TO NUMB	ER OF CLASSES?		
d.   Exhibit D. Additional Description of the Variety (Op	· ·	IF YES, WHICH CLASSES?	FOUNDATION   REGISTERED   CERTIFIED		
Exhibit E. Statement of the Basis of the Owner's O     Voucher Sample (2,500 viable untreated seeds or, verification that tissue culture will be deposited and	for tuber propagated varieties,	21. DOES THE OWNER SPECIFY THAT SEED OF THIS YES NO VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?			
repository)	тапканев иг ан арргоуев ривис	IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.			
g. X Filing and Examination Fee (\$3,652), made payable States* (Mail to the Plant Variety Protection Office)	to "Treasurer of the United	FOUNDATION REGISTERED CERTIFIED  (If additional explanation is necessary, please use the space indicated on the reverse.)			
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRAN OR	RIAL) OR A HYBRID PRODUCED SFERRED, OR USED IN THE U. S.	23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)?			
OTHER COUNTRIES?		X YES NO			
X YES  IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE	NO , DISPOSITION, TRANSFER, OR	IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			
USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Pie		, , , , , , , , , , , , , , , , , , ,	<del>,,</del>		
The owners declare that a viable sample of basic seed of t for a tuber propagated variety a tissue culture will be deposed.	he variety has been furnished with applica	tion and will be replenished upon request in	accordance with such regulations as may be applicable, or		
The undersigned owner(s) is(are) the owner of this sexually and is entitled to protection under the provisions of Section	v reproduced or tuber propagated plant va		distinct, uniform, and stable as required in Section 42.		
Owner(s) is(are) informed that false representation herein of	can jeopardize protection and result in pen	alties.	,		
SIGNATURE OF OWNER		SIGNATURE OF OWNER			
I mount.	<i>V</i>				
NAME (Please print or type)		NAME (Please print or type)			
Timothy R. Kain					
CAPACITY OR TITLE Patent Scientist	<sup>2</sup> /27/06	CAPACITY OR TITLE	DATE .		
ST-470 (02-40-2003) designed by the Plact Variety Protection Office using World					

#### INSTRUCTIONS

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

#### **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pypo/pyp.htm

#### ITEM

18a. Give:

- (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
- (2) the details of subsequent stages of selection and multiplication;

(3) evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
  - (1) identify these varieties and state all differences objectively:

(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and

- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- . 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- 23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filling date.
- 21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)
- 22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Parent of a hybrid sold in the U.S. - April 2005

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

U.S. Patent Application No. 11/098,593 - filed April 4, 2005 (I226211)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.htm

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

ST-470 (02-10-2003) designed by the Plant Variety Protection Office with Word 2000.

## EXHIBIT A (revised)

#### Origin and Breeding History I226211

I226211 was selected for improved female seed parent characteristics and better general plant health.

Summer 1997	The inbred line 01DHD10 (a proprietary DEKALB Genetics Corporation inbred) was crossed to the inbred line 4SCQ3 (a proprietary DEKALB Genetics Corporation inbred) in nursery rows 97N:9002 and 97N:9061.
Winter 1997-98	The S0 seed was grown and self-pollinated in nursery row F22:4.
Summer 1998	The S1 seed was grown and self-pollinated in nursery rows 9880S1:101-51 thru 101-75. 98 ears were selected.
Summer 2000	S2 ears were grown ear-to-row and self-pollinated. 1 ear was selected in nursery row F3F4Tf:202-42.
Winter 2000-01	S3 ears were grown ear-to-row and self-pollinated. In nursery row SS1MX:3166. 3 ears were selected.
Summer 2001	S4 ears were grown ear-to-row and self-pollinated. 3 ears from nursery row F5ADV:281-17 were selected and designated as coded inbred I226211.
Winter 2001-02	S5 ears were grown ear-to-row and self-pollinated. 10 ears from nursery row K3LS-80:7-43 were selected.
Summer 2002	S6 ears were grown ear-to-row and self-pollinated. 20 ears were selected from nursery rows ELITE:513-27 thru 514-22.
Winter 2002-03	S7 ears were grown ear-to-row and self-pollinated. Final selection was completed in nursery rows 02MX-LS-N5-85:51161 thru 51190. This selection consisted of bulking S8 ears.

### Statement of Stability and Uniformity

Corn inbred I226211 was coded in 2001 with final selection made in 2002. This inbred has been reproduced by self pollination for three generations and judged to be stable. Inbred I226211 is uniform for all traits observed.

### Statement of Variants

1226211 shows no variants other than what would normally be expected due to environment or that would occur for almost any character during the course of repeated sexual reproduction.

### EXHIBIT B (revised)

#### Statement of Distinctness

Monsanto Technology <del>L.L.G.</del> believes that I226211 is most similar to corn inbred 01DHD10, an inbred developed by DEKALB Genetics Corporation.

I226211 and 01DHD10 differ most significantly in the following traits:

LLC

Trait	1226211	01DHD10
Glume Color	Purple (5 RP 5/8)	Green (5 GY 4/8)
Ear Position	Pendant	Upright
Cob Color	White (Lighter than 5 Y 9/1)	Red (5 R 3/8)

Corn variety I226211 has purple glume color, a pendant ear position and white cob color while comparative corn variety 01DHD10 has green glume color, an upright ear position and a red cob color.

## EXHIBIT B (revised)

### Description of Experimental Design

The corn varieties I226211, 01DHD10 and B73 were grown at the Waterman, IL observation nursery in years 2002-2003. The varieties were planted in 2 row plots with 15 plants per row in each of the three years. Trait data were collected on 10 random representative plants for most traits from each 2 row plot. Data on qualitative traits are usually collected on 10 plants from each 2 row plot. For Exhibit C all data were pooled and reported as means across the years for subject variety and the standard variety with standard deviation. The varieties are randomly planted in a 4.5 acre observation nursery which is located within a larger 18 acre field. Besides the observation nursery, this field consists of a research seed increase nursery and an IP seed inventory nursery. The location of each of these individual nurseries is rotated each year to a different location within the 18 acre field. Therefore subject inbreds are not planted adjacent to comparative or standard varieties and may be located in different areas of the larger field each year, therefore being influenced by spacial differences within the field. Growing conditions within the field are not uniform as there are some slight topographical variations such as lower areas which may accumulate and retain water or higher areas which are usually drier. The field is tiled and therefore a variety maybe planted close to a tile line while a comparative variety maybe planted further away and in a low spot within the field. Temporal varieties can exist as weather conditions from year to year can vary as well as planting dates can vary from year to year based on weather conditions. Weather conditions each year can vary the maturity rate of the varieties due to either favorable or unfavorable growing conditions.

Trait variability is not observed for each variety within its own test plot-plants are usually uniform and data are collected on the "most" representative plants- variability occurs due to spacial location of the test plot for that variety from year to year and to the temporal variation of weather conditions from year to year during the 2-3 years data are collected.

#### Waterman Research Station Weather Data 2002-2003

Date	Average Precip. (mm)	Ave. Monthly Temp – Max. (F°)	Ave. Monthly Temp-Min (F°)	Ave. Monthly Rel. Humid Max (%)	Ave. Monthly Rel. Humid – Min (%)
June 2002	5.3	81.3	60.4	90.7	47.7
July 2002	1.5	87.0	64.9	93.2	48.3
August 2002	5.7	83.1	61.0	96.0	51.8
Sept. 2002	1.5	79.4	52.6	95.0	42.7
June 2003	2.0	75.7	55.7	-	
July 2003	6.4	82.2	62.2	_	
August 2003	2.6	83.5	63.5	_	-
Sept 2003	2.6	72.9	52.9	-	<u> </u>

# United States Department of Agriculture, Agricultural Marketing Service Science and Technology, Plant Variety Protection Office National Agricultural Library Building, Room 400 Beltsville, MD 20705-2351

OBJECTIVE DESCRIPTION OF VARIETY CORN (Zea mays L.)

	CORN (Zea m	ays L.)				
Name of Applicant(s) Variety Seed Source			,	Variety Name or Temporary Designation		
Monsanto Technology LLC LLC				1226211		
Address (Street & No., or R.F.D. No., City, State, Zip Code and Country)			1	OR OFFICIAL USE	PVPO Number	
8350 Minnegan Road, Waterman, IL 60556				200600	128	
Place the appropriate number that describes the varietal characters ty necessary. Completeness should be striven for to establish an adequ	pical of this inbred variety ate variety description.	in the spaces below. R	ight justify w	hole numbers by adding le	ading zeroes if	
COLOR CHOICES (Use in conjunction with Munsell color code to describe all color choices; describe #25 and #26 in Comments  01=Light Green 06=Pale Yellow 11=Pink 16=Pale Purple 02=Medium Green 07=Yellow 12=Light Red 17=Purple 03=Dark Green 08=Yellow-Orange 13=Cherry Red 18=Colorless 04=Very Dark Green 09=Salmon 14=Red 19=White 05=Green-Yellow 10=Pink-Orange 15=Red & White 20=White Cappe				ole 21≃Buff 22≃Tan 3 23=Brown 24=Bronze		
STANDARD INBRED CHOICES (Use the most similar (in background and maturity) of these to make comparisons based on grow-out trial data):           Yellow Dent Families:         Yellow Dent (Unrelated):         Sweet Corn:           Family B14         Members         C0109, ND246,         C13, lowa5125, P39, 2132           B37         B37, B76, H84         W117, W153R         Popcorn:           B73         N192, A679, B73, NC268         W182BN         SG1533, 4722, HP301, HP7211           C103         Mo17, Va102, Va35, A682         White Dent:         Pipecorn:           Oh43         A619, MS71, H99, Va26         White Dent:         Pipecorn:           WF9         W64A, A554, A654, Pa91         CI66, H105, Ky228         Mo15W, Mo16W, Mo24W					i1, HP7211	
TYPE: (describe intermediate types in Comments section)     Standard			Standard	Standard Inbred Name B73		
2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7	2 1=Sweet 2=Dent 3=Flint 4=Flour 5=Pop 6=Ornamental 7=Pipecorn 2 Ty			ype		
2. REGION WHERE DEVELOPED IN THE U.S.A.: Stan			Standard	tandard Seed Source		
2 1=Northwest 2=North central 3=Northeast 4=Southeast 5=South central 6=Southwest 7=Other 2 Region						
3. MATURITY (In Region Best Adaptability; show Heat Unit formula in "Comments" section):  DAYS HEAT UNITS B 0 1 3 8 6. 0 From emergence to 50% of plants in silk  DAYS THEAT UNITS 7 4 1 6 0 8.5						
80 1386.0 From emergence to 50% of plants	in pollen		74	1 5 5 5.0		
From 10% to 90% pollen shed				<del>_</del>		
From 50% slik to optimum edible o						
From 50% silk to harvest at 25% r	noisture					
4. PLANT:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
2 2 8. 4 cm Plant Height (to tassel tip)	10.0	30	2 0 9.6	13.2	30	
0 8 3. 5 cm Ear Height (to base of top ear node)	9.7	30	6 6.5	6.3	30	
2 1. 5 cm Length of Top Ear Internode	1.8	30	1 4.7	1.7	30	
Average Number of Tillers						
1.0 Average Number of Ears per Stalk	0.0	30	1.0	0.0	30	
3 Anthocyanin of Brace Roots: 1=Absent 2=Faint 3=Mc	derate 4=Dark		2			
Application Variety Data	Page 1			inbred Data		
	. 490 .	744 1.4.4	Ottariodio I	marau baw	<u></u>	

Application Vari	iety Data	D A		1 00			
	icly Data	Page 2			Inbred Data		
5. LEAF:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
0 8 . 6	cm Width of Ear Node Leaf	0.7	30	7.5	0.9	30	
74.5	cm Length of Ear Node Leaf	2.7	30	7 4.8	5.7	30	
6.5	Number of leaves above top ear	0.7	30	5.5	0,5	15	
1 8, 5	degrees Leaf Angle (measure from 2nd leaf above ear at anthesis to	6.5 o stalk above leaf)	30	23.5	3.7	30	
03	Leaf Color (Munsell code 5 GY 3/4)			02 (Muns	sell code 5 GY 4/8)		
4	Leaf Sheath Pubescence (Rate on scale from	1=none to 9=like peach fuzz)		5			
4	Marginal Waves (Rate on scale from 1=none to	9=many)		6			
8	Longitudinal Creases (Rate on scale from 1=no	one to 9=many)		6			
6. TASSEL:		Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
0 3, 6	Number of Primary Lateral Branches	2.0	30	5. 5	0.9	30	
2 0. 8	Branch Angle from Central Spike	7.1	30	28.0	8.4	30	
3 6. 4	cm Tassel Length (from top leaf collar to tassel tip)	2.9	30	4 5.6	2.6	30	
4.7	Pollen Shed (Rate on scale from 0=male sterile t	o 9=heavy shed)		6.8			
17	Anther Color (Munsell code 5 RP 5/8)	•		0 7 (Munse	0 7 (Munsell code 2.5 Y 8/10)		
17	Glume Color (Munsell code 5 RP 5/8)			1 7 (Munsell code 5 RP 5/8)			
1	Bar Glumes (Glume Bands): 1=Absent 2=Preser	nt		1			
7a. EAR (Unhus	sked Data):					W	
22 Sill	k Color (3 days after emergence) (Munsell code 2	.5 GY 8/6 with 5 R 5/8)		0.7 (Muns	ell code 2.5 Y 8/10)		
0.2 Fre	esh Husk Color (25 days after 50% silking) (Munse	ell code 5 GY 4/8)		0 2 (Muns	ell code 5GY 4/8)		
2 1 Dry	Husk Color (65 days after 50% Silking) (Munsell d	code 2.5 Y 8/4)		2 1 (Munse	ell code 2.5 Y 8/4)		
3 Pos	sition of Ear at Dry Husk Stage: 1=Upright 2=Horiz	ontal 3=Pendent		1			
9 Hus	sk Tightness (Rate on scale from 1=very loose to 9	P=very tight)		9			
2 Hus tip) 4=Ven	sk Extension (at harvest): 1=Short (ears exposed) y Long (>10 cm)	2=Medium (<8 cm) 3=Long (8-	-10 cm beyond ear	2			
7b. EAR (Husked	d Ear Data):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size	
1 4. 3	cm Ear Length	0.8	30	1 3.7	0.4	30	
4 2. 3	mm Ear Diameter at mid-point	1.3	30	4 4.4	1.1	15	
100.2	gm Ear Weight	8.9	30	1 2 8.7	6.5	15	
1 5 .6	Number of Kernel Rows	1.7	30	1 7.6	1.7	15	
2	Kernel Rows: 1=Indistinct 2=Distinct			2			
1	Row Alignment: 1=Straight 2=Slightly Curved 3=	Spiral		1			
6, 9 0	cm Shank Length	1.5	30	7.7	2.6	15	
2	Ear Taper: 1=Slight 2=Average 3=Extreme			2			
application Variety	y Data			Standard Ir	nbred Data		
lote: Use chart or	n first page to choose color codes for color traits.			1	<del></del>	· · · · · · · · · · · · · · · · · · ·	

Application Variety Data	Page 3		Standard In	bred Data	
8. KERNEL (Dried):	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
1 1 .2 mm Kernel Length	0.5	30	1 1.7	0.1	15
0 7 .7 mm Kernel Width	0.4	30	7.8	0.3	15
4 .0 mm Kernel Thickness	0.1	30	4.0	0.2	15
4 2 .2 % Round Kernels (Shape Grade)	7.1	500g	3 8.7	6.4	500g
1 Aleurone Color Pattern: 1=Homozygous 2=Segrega	ating (describe)	-	1		·
1 9 Aleurone Color (Munsell code Lighter than 5 Y 9/1)		- <del></del>	1 9 (Munse	Il code Lighter than 2.5 Y 9.	/2)
0.7 Hard Endosperm Color (Munsell code 2.5 Y 8/10)			2 6 (orange	e) (Munsell code 7.5 YR 7/8	3)
3 Endosperm Type: 1=Sweet (su1) 2=Extra Sweet (s 5=Waxy Starch 6=High Protein 7=High Lysine 10=Other	sh2) 3=Normal Starch 8=Super Sweet (se)	4=High Amylose Starch 9=High Oil	03		
2 4 . 1 gm Weight per 100 Kernels (unsized sample)	2.6	1200 seeds	2 3.1	0.6	2000 seeds
. 9, COB:	Standard Deviation	Sample Size	Mean	Standard Deviation	Sample Size
2 6 .6 mm Cob Diameter at mid-point	0.5	30	2 7.1	1.7	15
1 9 Cob Color (Munsell code Lighter than 5 Y 9/1)			1 1 (Munsell	code 5 R 6/6)	
10. DISEASE RESISTANCE (Rate from 1 (most susceptible) to 9 (most Race or Strain Options blank if polygenic):	st resistant); leave blank	if not tested; leave			· · · · · · · · · · · · · · · · · · ·
A. Leaf Blights, Wilts, and Local Infection Diseases					
7 Anthracnose Leaf Blight (Colletotrichum graminicola) 7 Common Rust (Puccinia sorghi) Common Smut (Ustilago maydis) 6 Eyespot (Kabatiella zeae) 8 Goss's Wilt (Clavibacter michiganense spp. nebraskense) 5 Gray Leaf Spot (Cercospora zeae-maydis) 7 Helminthosporium Leaf Spot (Bipolaris zeicola) 7 Northern Leaf Blight (Exserohilum turcicum) 7 Southern Leaf Blight (Bipolaris maydis) Southern Rust (Puccinia polysora) 8 Stewart's Wilt (Erwinia stewartii) Other (Specify)	Race 2 Race 1 Race O		5 Common Common 7 Eyespot 7 Goss's V Gray Le: 7 Helmintf 5 Northerr 3 Southerr Southerr 6 Stewart's	n Smut  Nilt af Spot nosporium Leaf Spot b Leaf Blight 1 Leaf Blight	Race 1
B. Systemic Diseases					
Corn Lethal Necrosis (MCMV and MDMV) Head Smut (Sphacelotheca reiliana) Maize Chlorotic Dwarf Virus (MCDV) Maize Chlorotic Mottle Virus (MCMV) Maize Dwarf Mosaic Virus (MDMV) Sorghum Downy Mildew of Corn (Peronosclerospora sorghi) Other (Specify) C. Stalk Rots	Strain		Head Sn Maize Cl Maize Cl Maize D	nforotic Dwarf Virus nforitic Mottle Virus warf Mosaic Virus n Downy Mildew of Corn	Strain
Anthracnose Stalk Rot (Colletotrichum graminicola)				O. 11 = 1	
Diplodia Stalk Rot (Stenocarpella maydis)  Fusarium Stalk Rot (Fusarium moniliforme)  Gibberella Stalk Rot (Gibberella zeae)  Other (Specify)			Diplodia Fusarium	n Stalk Rot a Stalk Rot	
D. Ear and Kernel Rots					
Aspergillus Ear and Kernel Rot (Aspergillus flavus) Diplodia Ear Rot (Stenocarpella maydis) Fusarium Ear and Kernel Rot (Fusarium moniliforme) Gibberella Ear Rot (Gibberella zeae) Other (Specify)			Diplodia I	ı Ear & Kernel Rot a Ear Rot	
Application Variety Data			Standard Inbr	ed Data	
Note: Use chart on first page to change color and a far pales trails	****	***		·····	

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Application Variety Data Page 4	Standard Inbred Data			
11. INSECT RESISTANCE (Rate from 1 (most susceptible) to 9 (most resistant); leave blank if not tested):				
Banks Grass Mite (Oligonychus pratensis)  Standard Deviation Sample Size	Standard Deviation Sample Size			
Corn Earworm (Helicoverpa zea)	Banks Grass Mite			
Leaf-Feeding Silk Feeding: mg larval wt.	Corn Earworm Leaf Feeding			
Ear Damage	Ear Damage			
Corn Leaf Aphid (Rhopalosiphum maidis) Corn Sap Beetle (Carpophilus dimidiatus)	Corn Leaf Aphid Corn Sap Beetle			
European Corn Borer (Ostrinia nubilalis)  1st Generation (Typically Whorl Leaf Feeding) 2nd Generation (Typically Leaf Sheath-Collar Feeding) Stalk Tunneling: cm tunneled/plant	European Corn Borer 1st Generation 2nd Generation			
Fall Armyworm (Spodoptera frugiperda)	Fall Armyworm			
Leaf-Feeding Silk-Feeding: mg larval wt	Leaf Feeding			
Maize Weevil (Sitophilus zeamaize) Northern Rootworm (Diabrotica barben) Southern Rootworm (Diabrotica undecimpunctata)	Maize Weevil Northern Rootworm Southern Rootworm			
Southwestern Corn Borer ( <i>Diatraea grandiosella</i> ) Leaf Feeding Stalk Tunneling : cm tunneled/plant	Southwestern Corn Borer Leaf Feeding			
Two-spotted Spider Mite (Tetranychus urticae) Western Rootworm (Diabrotica virgifera virgifera) Other (Specify)	Two-spotted Spider Mite Western Rootworm Other (Specify)			
12. AGRONOMIC TRAITS:				
5 Stay Green (at 65 days after anthesis) (Rate on a scale from 1=worst to 9=excellent.)	2 Stay Green			
0 0 .0 % Dropped Ears (at 65 days after anthesis)	0 0 .0 % Dropped ears			
0 0 .0 % Pre-anthesis Brittle Snapping	0 0 .0 % Pre-anthesis Brittle Snapping			
0 0. 0 % Pre-anthesis Root Lodging	0 0 .0 % Pre-anthesis Root Lodging			
0 0. 0 % Post-anthesis Root Lodging (at 65 days after anthesis)	0 0 .0 % Post-anthesis Root Lodging			
Kg/ha Yield of Inbred Per Se (at 12-13% grain moisture)	Yield			
13. MOLECULAR MARKERS: (0=data unavailable; 1=data available but not supplied; 2=data supplied)				
1 Isozymes 0 RFLP's 0 RAPD'sOther (Specify)				
REFERENCES:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Butler, D.R. 1954. A System for the Classification of Corn Inbred Lines. PhD Thesis, Ohio State University.  Emerson, R.A., G.W. Beadle, and A.C. Fraser. 1935. A Summary of Linkage Studies in Maize. Cornell A.E.S., Mem. 180.  Farr, D.F., G.F. Bills, G.P. Chamuris, A.Y. Rossman. 1989. Fungi on Plant and Plant Products in the United States. The American Phytopathological Society, St. Paul, MN. Inglett, G.E. (Ed.) 1970. Corn: Culture, Processing, Products. Avi Publishing Company, Westport, C.T. Jugenheimer, R.W. 1976. Corn: Improvement, Seed Production, and Uses. John Wiley & Sons, New York.  McGee, D.C. 1988. Maize Diseases. APS Press, St. Paul, MN. 150 pp.  Munsell Color Chart for Plant Tissues. Macbeth. P.O. Box 230. Newburgh, N.Y. 12551-0230  The Mutants of Maize. 1968. Crop Science Society of America. Madison, WI. Shurtleff, M.C. 1980. Compendium of Corn Diseases. APS Press, St. Paul, MN. 105 pp.  Sprague, G.F., and J.W. Dudley (Editors). 1988. Corn and Corn Improvement, Third Edition. Agronomy Monograph 18. ASA, CSSA, SSSA, Madison, WI. Stringfield, G.H. Maize Inbred Lines of Ohio. Ohio A.E.S., Bul. 831. 1959.  U.S. Department of Agriculture. 1936, 1937. Yearbook.				
COMMENTS (e.g. state how heat units were calculated, standard inbred seed source, and/or where data was collected. C	continue in Exhibit D):			
Heat Unit Calculation: GDU = <u>Daily Max Temp (&lt;=86°F) + Daily Min Temp (&gt;=50°F)</u> - 2	- 50°F			

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U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE  EXHIBIT E	Application is required in order to decertificate is to be issued (7 U.S.C. 2 confidential until the certificate is issued.	421). The information is held
STATEMENT OF THE BASIS OF OWNERSHIP  1. NAME OF APPLICANT(S)	2 TEMPODADY DECICALATION	O MADUTTMANAT
1. TANTIL OF ALL EIGHT (O)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
Monsanto Technology <del>L.L.C.</del> LLC		1226211
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)	5. TELEPHONE (Include area code)	6. FAX (Include area code)
800 N. Lindbergh Blvd.	(815) 758-9281	(815) 758-3117
Creve Couer, MO 63167 U.S.A.	7. PVPO NUMBER	200600128
8. Does the applicant own all rights to the variety? Mark an "X" in the	e appropriate block. If no, please expla	in. XYES NO
×	·	
9. Is the applicant (individual or company) a U.S. national or a U.S. b	pased company? If no, give name of co	ountry. X YES NO
10. Is the applicant the original owner?	NO If no, please answer one	of the following:
b. If the original rights to variety were owned by a company(ies),  YES	is (are) the original owner(s) a U.S. bas  NO If no, give name of countr	
11. Additional explanation on ownership (Trace ownership from origin	nal breeder to current owner. Use the re	everse for extra space if needed):
Corn Variety 1226211 was originated a Technology L.L.C. By agreement between rights to any invention, discovery or de No rights to such invention, discovery or the such invention.	ween Monsanto Technology <del>L.C.</del> evelopment are assigned to Mon	<b>&amp;</b> and the breeder, all santo Technology <del>L.L.C.</del>
PLEASE NOTE:		
Plant variety protection can only be afforded to the owners (not license	sees) who meet the following criteria:	
If the rights to the variety are owned by the original breeder, that pen national of a country which affords similar protection to nationals of	erson must be a U.S. national, national of the U.S. for the same genus and specie	of a UPOV member country, or ess.
<ol><li>If the rights to the variety are owned by the company which employ nationals of a UPOV member country, or owned by nationals of a c genus and species.</li></ol>	red the original breeder(s), the company country which affords similar protection to	must be U.S. based, owned by o nationals of the U.S. for the same
3. If the applicant is an owner who is not the original owner, both the o	original owner and the applicant must m	eet one of the above criteria.
The original breeder/owner may be the individual or company who dire Act for definitions.	ected the final breeding. See Section 4	1(a)(2) of the Plant Variety Protection
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, a control number. The valid OMB control number for this information collection is 0581-0055 including the time for reviewing the instructions, searching existing data sources, gathering ar	The time required to complete this information collect	tion is estimated to average 0.1 hour per response,

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> U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE **SCIENCE AND TECHNOLOGY PLANT VARIETY PROTECTION OFFICE** BELTSVILLE, MD 20705

**EXHIBIT F** 

	DECLARATION REGARDING DEPOSIT		
NAME OF OWNER (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	TEMPORARY OR EXPERIMENTAL DESIGNATION	
Monsanto Technology LLC	8350 Minnegan Road		
	Waterman, IL 60556 U.S.A.	VARIETY NAME I226211	
NAME OF OWNER REPRESENTATIVE (S)	ADDRESS (Street and No. or RD No., City, State, and Zip Code and Country)	FOR OFFICIAL USE SHIP	
Timothy R. Kain	8350 Minnegan Road Waterman, IL 60556	PVPO NUMBER	
	U.S.A.	200600128	

I do hereby declare that during the life of the certificate a viable sample of propagating material of the subject variety will be deposited, and replenished as needed periodically, in a public repository in the United States in accordance with the regulations established by the Plant Variety Protection Office.

28 (6) 2008